Claims

1. In a communication system, a method for processing a frame of data comprising:

partitioning said frame of data into at least a first and second portions of data symbols;

assigning a first channel element to demodulate data symbols of said first portion of data symbols;

assigning a second channel element to demodulate data symbols of said second portion of data symbols.

2. The method as recited in claim 1 further comprising:

demodulating said first and second portions of data symbols by correspondingly said first and second channel elements.

3. The method as recited in claim 2 further comprising:

receiving said frame of data via a radio frequency receiver front end;

correlating with at least a data symbol in said frame of data in accordance with timing of at least one assigned finger;

using a result of said correlating in said first and second channel elements for said demodulating.

4. The method as recited in claim 2 further comprising:

writing to, and subsequently reading from, demodulated data symbols from said first and second channel elements, a RAM in accordance with a de-interleaving function in said communication system.

5. In a communication system, a method for processing a frame of data comprising:

partitioning said frame of data into a plurality of portions of data symbols;

assigning a plurality of channel elements to demodulate data symbols of correspondingly said plurality of portions of data symbols.

6. The method as recited in claim 5 further comprising:

demodulating said plurality of portions of data symbols by correspondingly said plurality of assigned channel elements.

7. The method as recited in claim 6 further comprising:

receiving said frame of data via a radio frequency receiver front end;

correlating with at least a data symbol in said frame of data in accordance with timing of at least one assigned finger;

using a result of said correlating in said plurality of channel elements for said demodulating.

8. The method as recited in claim 6 further comprising:

writing to, and subsequently reading from, demodulated data symbols from said plurality of channel elements, a RAM in accordance with a de-interleaving function in said communication system.

9. The method as recited in claim 5 further comprising:

receiving information related to a data rate of data symbols of said frame of data.

10. The method as recited in claim 5 wherein the number of said plurality of portions of data symbols is based on a data rate of data symbols of said frame of data.

11. The method as recited in claim 5 wherein the number of said plurality of channel elements is based on a data rate of data symbols of said frame of data.

12. In a communication system, a method for processing a plurality of frames of data comprising:

partitioning each of said plurality of frames of data into a plurality of portions of data symbols;

assigning a plurality of channel elements to each of said plurality of frames of data to demodulate data symbols of correspondingly said plurality of portions of data symbols of each of said plurality of frames of data.

13. The method as recited in claim 12 wherein the number of said plurality of channel elements assigned to each frame of data is based on a data rate of the data symbols in each of said plurality of frames of data.

14. The method as recited in claim 12 wherein the number of said plurality of portions of data symbols in each of said plurality of frames of data is based on a data rate of the data symbols in each of said plurality of frames of data.

15. The method as recited in claim 12 further comprising:

receiving information related to a data rate of data symbols of each of said plurality of frames of data.

16. The method as recited in claim 12 further comprising:

demodulating the data symbols in each of said plurality of portions of data symbols of each of said plurality of frames of data correspondingly by said plurality of assigned channel elements.

17. The method as recited in claim 12 further comprising:

receiving said plurality of frames of data via a radio frequency front end.

18. The method as recited in claim 16 further comprising:

assigning at least a finger to each of said plurality of frames of data;

correlating with at least a data symbol in each of said plurality of frames of data in accordance with timing of said least finger assigned to each of said plurality of frames of data;

using a result of said correlating in said plurality of channel elements for said demodulating.

19. The method as recited in claim 16 further comprising:

writing to, and subsequently reading from, demodulated data symbols from said plurality of channel elements, a RAM in accordance with a de-interleaving function in said communication system.

20. In a communication system, an apparatus for processing a frame of data comprising:

a finger resource for partitioning said frame of data into a plurality of portions of data symbols;

a plurality of channel elements for demodulating data symbols of correspondingly said plurality of portions of data symbols.

21. The apparatus as recited in claim 20 further comprising:

a radio frequency receiver front end for receiving said frame of data;

wherein said finger configured for correlating with at least a data symbol in said frame of data in accordance with timing of at least one timing hypothesis.

22. The apparatus as recited in claim 20 further comprising:

a RAM for writing, and subsequently reading, demodulated data symbols from said plurality of channel elements in accordance with a de-interleaving function in said communication system.

23. The apparatus as recited in claim 20 wherein the number of said plurality of portions of data symbols is based on a data rate of data symbols of said frame of data.

24. The apparatus as recited in claim 20 wherein the number of said plurality of channel elements is based on a data rate of data symbols of said frame of data.

25. In a communication system, an apparatus for processing a plurality of frames of data comprising:

a finger resource for partitioning each of said plurality of frames of data into a plurality of portions of data symbols;

a plurality of channel elements assigned to each of said plurality of frames of data to demodulate data symbols of correspondingly said plurality of portions of data symbols of each of said plurality of frames of data.

26. The apparatus as recited in claim 25 wherein the number of said plurality of channel elements assigned to each frame of data is based on a data rate of the data symbols in each of said plurality of frames of data.

27. The apparatus as recited in claim 25 wherein the number of said plurality of portions of data symbols in each of said plurality of frames of data is based on a data rate of the data symbols in each of said plurality of frames of data.

28. The apparatus as recited in claim 25 further comprising:

a radio frequency front end for receiving said plurality of frames of data.

29. The apparatus as recited in claim 25 further comprising:

a RAM for writing, and subsequently reading, demodulated data symbols from said plurality of channel elements in accordance with a de-interleaving function in said communication system.

30. In a communication system, an apparatus for processing a frame of data comprising:

means for partitioning said frame of data into a plurality of portions of data symbols;

means for assigning a plurality of channel elements to demodulate data symbols of correspondingly said plurality of portions of data symbols.

31. The apparatus as recited in claim 30 further comprising:

means for demodulating said plurality of portions of data symbols by correspondingly said plurality of assigned channel elements.

32. The apparatus as recited in claim 31 further comprising:

means for receiving said frame of data via a radio frequency receiver front end;

means for correlating with at least a data symbol in said frame of data in accordance with timing of at least one assigned finger;

means for using a result of said correlating in said plurality of channel elements for said demodulating.

33. The apparatus as recited in claim 31 further comprising:

means for writing to, and subsequently reading from, demodulated data symbols from said plurality of channel elements, a RAM in accordance with a de-interleaving function in said communication system.

34. The apparatus as recited in claim 30 wherein the number of said plurality of portions of data symbols is based on a data rate of data symbols of said frame of data.

35. The apparatus as recited in claim 30 wherein the number of said plurality of channel elements is based on a data rate of data symbols of said frame of data.

36. In a communication system, an apparatus for processing a plurality of frames of data comprising:

means for partitioning each of said plurality of frames of data into a plurality of portions of data symbols;

means for assigning a plurality of channel elements to each of said plurality of frames of data to demodulate data symbols of correspondingly said plurality of portions of data symbols of each of said plurality of frames of data.

37. The apparatus as recited in claim 36 wherein the number of said plurality of channel elements assigned to each frame of data is based on a data rate of the data symbols in each of said plurality of frames of data.

38. The apparatus as recited in claim 36 wherein the number of said plurality of portions of data symbols in each of said plurality of frames of data is based on a data rate of the data symbols in each of said plurality of frames of data.

39. The apparatus as recited in claim 36 further comprising:

means for receiving information related to a data rate of data symbols of each of said plurality of frames of data.

40. The apparatus as recited in claim 36 further comprising:

means for demodulating the data symbols in each of said plurality of portions of data symbols of each of said plurality of frames of data correspondingly by said plurality of assigned channel elements.

41. The apparatus as recited in claim 36 further comprising:

means for receiving said plurality of frames of data via a radio frequency front end.

42. The apparatus as recited in claim 40 further comprising:

means for assigning at least a finger to each of said frame of data of said plurality of frames of data;

means for correlating with at least a data symbol in each of said plurality of frames of data in accordance with timing of said least finger assigned to each of said frame of data of said plurality of frames of data;

means for using a result of said correlating in said plurality of channel elements for said demodulating.

43. The apparatus as recited in claim 40 further comprising:

means for writing to, and subsequently reading from, demodulated data symbols from said plurality of channel elements, a RAM in accordance with a de-interleaving function in said communication system.